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Southwestern MEDICINE

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Sig. —or "let it be marked"—indicates directions for the patient's use which are to be marked on the prescription package label.

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KAJEEB BRJWMN*

The American Public loves to be fooled. Recently at a Southwestern State Fair an observer could see the midway doing a rushing business. Substantial citizens on a holiday, knowing full well that the gaudy attractions were not all that they appeared to be on the surface, literally poured money into the coffers of these enterprises. In the same spirit, patent medicines have for many years occupied a prominent position in the hearts of the American Public. The gray beards like myself can well remember the medicine show with the snake oil. Those of us who suffered through the noble experiment well remember various types of bitters which were sold, which, when added to ginger ale made a slightly obnoxious, but potent potion.

There was a furore producing concoction, Lydia E. Pinkham's Vegetable Compound, the boon to the wayward maiden, and curiously, enough, according to the advertisements, the hope of the childless mother. It was rumored that during prohibition days it was entirely possible, if one's stomach did not rebel, to forget the worries of the present, if one was able to indulge in sufficient amounts of this compound. Apparently, the efficacy of the compound depends to a great extent on a rather large precentage of alcohol.

SWAMP MESSIAH

This year, 1950, a Messiah from the swamps of Louisiana, after a number of tries in the patent medicine game, has come up with a rather startling preparation known as Hadacol. This particular compound, like many of its predecessors, according to its testimonials, has allegedly rejuvenating abilities. The product, until the Federal Trade Commission entered the picture, was said to assure good health and restore a youthful feeling and appearance.

However, at the present time, the claims, in spite of the ballyhoo, are really very modest. Hadacol, attacks, according to its makers, "illnesses due to the lack of Vitamin B-1, B-2, Iron, and Niacin in the system." While this product has been able to finance the greatest medicine show of all times, a show featuring such radio and screen personalities as Mickey Rooney, Roy Acuff and his Smoky Mountain Boys, Connie Boswell, Minnie Pearl, Burns and Allen, Chico Marx, and Carmen Miranda and her rhumba band, the greatest aid to its sale has been the sterling testimonials from those benighted sufferers from the varied self-diagnosed ailments.

"MINOR LEAGUES"

Testimonial letters have always been rather easy to obtain, and, while those written supporting the claim of this miraculous Louisiana rejuvenator are, let us say, moderately good, they are essentially in the terms of the vernacular, in the "minor leagues" as compared with testimonials rendered to a product as "Kajeeb Brjwmn" or "Grand Imperial Renovator". Here, gentle readers, we have a real preparation. It must be granted, however, that in the early part of the 19th Century in the years of 1825 to 1837, the Federal Trade Commission did not exert any influence. Had it, perhaps, this sterling mixture would not have gained its vast popularity.

Kajeeb Brjwmn(1) was described as "a mild vegetable compound", and was said to be "accidentally discovered by a Baratarian lunatic in a lucid interval while searching for birds' nests in a mangrove swamp". At least we must all admit that the method of discovery was not only unique, but honest. This medication was really efficacious, and while the proponents of Lydia E. Pinkham's Compound and Hadacol have made some rather lurid claims as to the efficiency of their products, these claims could not approach the claims made for Kajeeb Brjwmn. The patient did not really have to swallow this preparation. He merely had to look at it, rub it on his nose, or strange as it may seem, have its name shouted in his ear. For proof of this, the following testimonials are offered:

NOISY CURE

"Dear Doctor — I was stone blind for sixteen years, and tried the Thompsonian medicines, from numbers one to twenty and got worse — of course. Bought a bottle of your invaluable medicine, and by merely looking at it, was restored to sight immediately. Your grateful friends." James Stone, Laputa, Nov. 5, 1825."

"My Dear Von Humbus:—Some ten years since, I was so unfortunate as to catch the "mania-a-potu" which united with that worst of contagions, the "brandreth-phobia" continued to delude my system in an extraordinary degree. From the combined effects of these two epidemicks, I have been in the same hospital forty-nine times. Cured by my wife shouting six times in my ear 'kajeeb brjwmn'." A. C. Dewberry, M. D., Philadelphia, January 9, 1837."

"Dear Doctor—About twenty years ago I had my shoulder dislocated by a stroke from a lion, and with all the exertions of our doctors, I could not get it reduced. Though I took the hygeian medicines, I suffered extremely until within a year. I bought the 'kajeeb brjwmn', and was immediately cured by running the contents of one bottle on the end of my nose. Gratefully yours, etc." James Gull, Cafraria, July 25, 1829."

SITUATION ACUTE

In these turbulent days when the proponents of socialized medicine, literally scream that the health of the country at large is deteriorating, and point out that approximately 50 per cent of our youth have been rejected for the draft, and when, in the sovereign state of California, an 84-year-old female sues her husband for annulment and claims that he obtained her consent to marriage by fraud and then failed in his husbandly duties, the situation becomes acute, and the only answer that our present patent medicine men render is simply the prospect of a parrot riding around the country in a limousine squawking "Polly wants Hadacol". Our legislators have appropriated money to investigate very many projects. It would not be surprising, if the bureaucrats were acquainted with this sterling product, that they would hie themselves to the rolling hills of the Pennsylvania Dutch country and attempt to discover the formula of Kajeeb Brjwmn, and thereby settle, once and for all, the problem of our nation's health.

(1) THE PIONEER GAZETTE, Vol. 1, No. 10, August 1950, 29 Worthington St., Springfield, Mass. — "The New York Mirror — 1837."

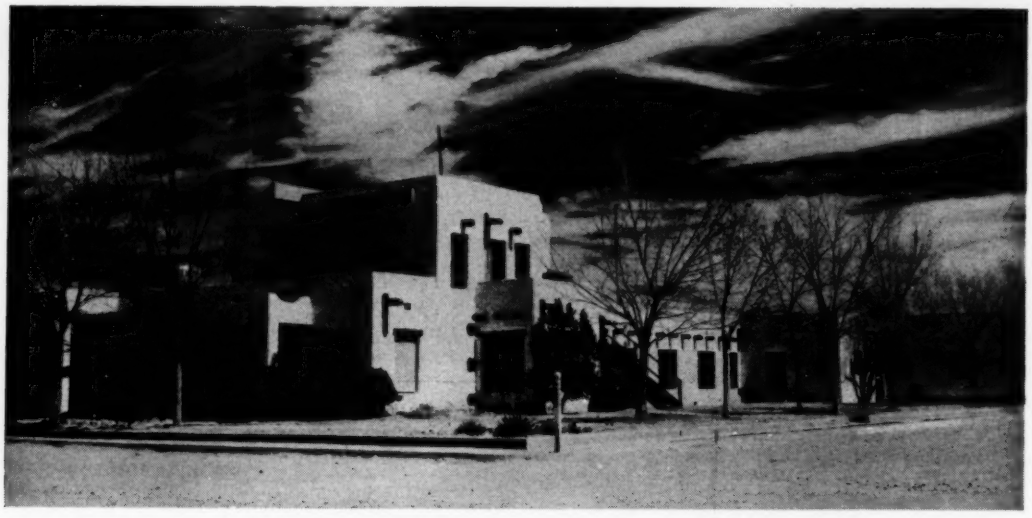
PEDIATRICS

Chloramphenicol In Whooping Cough: Report On Five Severe Cases

Macrae, J., Lancet 1:400, 1950

Administration of Chloromycetin to five severely ill pertussis patients effected immediate improvement and rapid recovery. Patients were given an initial dose of 0.25 Gm. followed by 0.125 Gm. every six hours for seven days, and 0.125 Gm. every twelve hours for an additional seven days.

ST. ANN'S HOSPITAL IN TRUTH OR CONSEQUENCES



St. Ann's Hospital in Sierra County, N. M.

St. Ann's Hospital (formerly Virginia Ann Clinic and Hospital) of Truth or Consequences, N. M., was leased by the Sisters of the Sorrowful Mother (a Wisconsin corporation) Sept. 1, 1948, from Mrs. La Rue Brown and Mr. H. A. Collins.

The hospital is located near Highway 85 almost in the heart of the city of Truth or Consequences. It is a small general hospital of surgery, medicine, pediatires and obstetrics with a capacity of 34 beds and six bassinetts.

The hospital has all modern facilities and is well equipped with X-ray, clinical laboratory, surgery and gas machine for anesthesia and resuscitator and incubator in the obstetrical department.

It has a fine medical staff of five physicians with a hospital staff of eight sisters, registered in their respective departments, assisted by graduate nurses and helpers.

It is one of the best and finest hospitals in Southern New Mexico.

Constipation Relieved By Carboxymethylcellulose

Based on a study of 250 patients observed over a three year period, Schultz reports in the *American Journal of Digestive Diseases* (16:319, 1949) that sodium carboxymethylcellulose affords effective relief of constipation. He found that patients with average constipation had normal bowel movements after one to three days of treatment and those with chronic constipation returned to normal after six to ten days of treatment.

Sodium carboxymethylcellulose was administered to the group in the form of powder at the inception of treatment and was later given in tablet form. Most patients received a dosage of two to five 0.75 Gm. tablets in the morning and at night. The dosage was then reduced after a few weeks from one to two tablets three times a day.

No intestinal impaction was noted even though some of the patients took the preparation for many months. Normal stools were observed in cases of diarrhea following treatment, leading the physician to conjecture that sodium carboxymethylcellulose possessed an apparent ability to absorb irritating toxins from the intestinal tract.

According to Schultz, this laxative has the following advantages: it is completely non-toxic; does not produce roughage which is irritable to patients with spastic colon, hemorrhoids or proctitis; resquires low dosage; possesses lubricating properties; is tasteless and ordorless; does not interfere with the absorption of essential nutritional elements; and does not absorb fat-soluble vitamins from the intestinal tract.

Chloromycetin in Rocky Mountain Spotted Fever

In the 15 patients reported by Pincoffs, Guy, Lister, Woodward and Smadel,[10] the diagnosis of Rocky Mountain spotted fever (eastern) was confirmed by one or more of the usual laboratory diagnostic procedures. The initial dose of Chloromycetin was large, 75 mg. per Kg. of bodyweight, being administered in two or three parts at about one-hour intervals. Then, every three hours, day and night, children under 16 years (10 cases) were given 0.25 Gm.; older patients were given 0.5 Gm.

Symptoms showed steadv, though not striking improvement in the first twenty-four hours; but on the second day, headache, mental dullness, and similar symptoms were clearly lessened. Most dramatic evidence of Chloromycetin's therapeutic effectiveness was the temperature chart which showed a drop to normal levels in all cases within seventy-six hours of the initial dose. The average pretreatment duration of fever was about nine and one-half days as compared with sixteen days for a typically representative control group. Duration of fever, after beginning treatment averaged 2.2 days. In this series, there was no recurrence of the disease when treatment was discontinued after twenty-four hours of normal temperature.

10. Pincoffs, M. C.; Guy, E. G.; Lister, L. M.; Woodward, T. E.; & Smadel, J. E.: The Treatment of Rocky Mountain Spotted Fever with Chloromycetin. *Ann. Int. Med.* 29:656, 1948.

De Rebus Medicis Et Politicis

BY ROBERT B. HOMAN, JR., M. D., EL PASO, TEXAS
MEMBER OF THE HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION

"REASON HAS NEVER FAILED MEN"

William Allen White, the late Kansas editor, was a profound believer in America and its way of life. Some of his writings are powerful contributions to our contemporary ideals and beliefs. A perfect example is this portion of an editorial from his pen, written in 1922.

"Put fear out of your heart. This nation will survive, this state will prosper, the orderly business of life will go forward if only men can speak in whatever way given them to utter what their hearts hold — by voice, by posted card, by letter or by press. Reason never has failed men. Only force and oppression have made the wrecks in the world".

How better can the strength of Freedom of speech, Freedom of the press, the right of petition be expressed? How better can the results of these Freedoms be defined? **Reason never has failed men!** Free men have the right to reason. They have the right to express the results of such reasoning and to vote their convictions.

DEMOCRATIC BOOKLET

It is, therefore, fitting that there should come to the hands of the writer a booklet entitled "Administration Health Plan" — subtitled "A Training Kit for Leaders" — published by the Democratic National Committee. This booklet is receiving widespread distribution to local leaders of the Democratic Party, labor leaders, and others. It is the rebuttal of the Democratic Party and the Truman Administration to the medical profession's fight against compulsory health insurance. Whether it represents the majority opinion of the Democratic National Committee or not is of little consequence. The point is that the issue of Compulsory Health Insurance is dominant today, and even if this booklet represents a minority, that minority has a right to be heard. If that minority consists of known social and economic planners and even of socialists, freedom of expression is open to them.

The premise of the action of the Democratic National Committee in endorsing the President's Health Insurance program is contained in these words — "In order to avoid socialized medicine in the United States, we endorse the President's program for broadened Federal activity in the entire field of health and medical care and the adoption of a pay-as-you-go insurance program to put better medical care within the financial reach of all Americans".

SOCIALISM DEFINED

Let's use some of Mr. White's "reasoning" on this play of words! The reader of this booklet is supposed to believe that socialized medicine will be avoided by the adoption of a nationalized system of medicine called by another name! How illogical can you get? Socialism, simply defined, is a political or economic theory of social organization based on governmental ownership and management of the essential means for the production and distribution of goods and services. In this case the "goods and services" provided are medical care, hospitalization, drugs, etc. We are expected to believe that we are avoiding socialism by accepting socialism!

It is further stated in the premise that a "pay-as-you-go insurance program" is the answer to the distribution of better medical care to all Americans. Is it possible that the Democratic Party, which has not balanced the national budget in many years, and has accumulated an unbelievable national debt, can expect the people to believe that anything it does can be done on a "pay-as-you-go" basis? The truth is that "you pay and you go" — to socialism or worse. The contents of the booklet itself are roughly divided into two parts: First, most Americans cannot afford medical care but government will provide it. Second, a slanderous attack on the American medical profession.

FIRST DIVISION

The first division states simply that "the dollar bill stands like a barrier between most of us and our doctors and hospitals". This beneficent party proposes to take the $ out of $ICKNE$$. (How's that, gentlemen?) Well, here is an administration which daily, weekly, monthly, and annually brags about how its inflationary prosperity has increased wages, purchasing power, national income — general prosperity, and then turns around and states emphatically that these same people — so benefitted by the party — are unable to pay a bill for medical care. Is that logical? Would these worthy gentlemen admit that there are some people in America who could not afford subsidy supported potatoes? You guess! Would they suggest that the $ be taken out of the taxe$ that support all of the economic planning in which they indulge? The American family is having more difficulty paying its taxes than in meeting its medical expenses.

Again a quote — "Under today's hap-hazard way, each family's health depends upon its wealth". This is a crack at "hap-hazard" free enterprise! This booklet did not say that under "today's hap-hazard way" each family's lodging, automobile, savings, food budget, clothing, comfort, recreation, and standard of living "depends upon its wealth". Those are things to be taken care of in the future — after our benefactors have paid our medical bill. The only thing "hap-hazard" about free enterprise today is the administration that is trying to control it. The propaganda organ promises that doctors will remain free — they do not have to join the "plan", knowing full well from experience in other countries that the individual doctor will be starved into line. The planners promise, for the benefit of church owned hospitals, that the government will not "take over" the hospitals. The truth is that it would be impossible for government control of hospitals to be avoided!

SECOND PORTION

In the second portion of this "guide to leaders", the American Medical profession, the A. M. A. and individual doctors are castigated for their "backward tendencies". The A. M. A. Educational Campaign is denounced. This, of course, is a direct attack on the "right of petition", which has been so ably defended by every great statesman in the history of America. The money raised for this campaign is characterized

(Continued on Page 372)

"FOLLIES" TO AID CEREBRAL PALSY CLINIC

The Planning group of the Junior League of El Paso announced that "The Follies of '50" will be held in Liberty Hall on November 17.

This is to be the biggest money raising project given by the group since the last Follies were presented in the Spring of 1941. "The Follies of '50" is to be produced by the Miles-Caven Production Co., and the producer is to be Mr. Jack Caven. He is bringing all the scenery, costumes, and the original music. In his words "I'm bringing Broadway to El Paso".

The need for a large money raising project was explained by Mrs. Paul Luckett, president of the group, with the Junior League assuming partial financial responsibility of the Cerebral Palsied Clinic. The group has given $7,500 towards new housing for the clinic, and there is the need for further funds to continue to finance their present programs.

$59,236 GIVEN

The Junior League of El Paso was started by 10 local women in 1930 and it now has an active membership of 105 members. In the past 18 years it has given $59,236 to programs and projects that it has sponsored. Money derived from the community by money raising projects goes back into the community in the form of various welfare programs.

Junior League members give an estimated 15,000 volunteer working hours per year in their regular volunteer jobs and donate their services to all local charity drives.

Some of the outstanding current programs of the Junior League of El Paso are the Young People's Symphony Concerts, heard yearly by over 8000 El Paso Students, and the Children's Theatre, a favorite among El Paso school children, which reached over 11,000 children this past year and League members trouped 21 Performances.

Leaders in putting on "The Follies of '50," sponsored by El Paso Junior League, are: (standing left to right) Mrs. Tom Donaldson, Mrs. William Massey and Mrs. Elliott Shapleigh. (seated) Mrs. Paul Luckett, Jr., and Mrs. Thomas Birmingham. Proceeds of the revue will go to El Paso Cerebral Palsy Clinic.

COMMITTEES NAMED

Mrs. Thomas Birmingham, the ways and means chairman of the group, has announced her planning group, which includes the following:

Talent — Mrs. Paul Luckett and Miss Betty Ruth Williams.

Cabaret — Mrs. Elliott Shapleigh and Mrs. Fred McKinstry.

Patroness — Mrs. Charles Leavell and Mrs. Dan Ponder.

Tickets — Mrs. Delphin von Briesen and Mrs. William Snow.

Costumes — Mrs. John Neff and Mrs. Harrison Hughey, Jr.

Properties — Mrs. Donald Johnson and Mrs. Scott Wilkey.

Program and Advertising — Mrs. Charles Gabriel and Mrs. Tom Donaldson.

Make-Up — Mrs. William Crombie.

Publicity — Mrs. William Massey and Mrs. Jess Lochausen.

Progesterone Carries Pregnancies To Term

Large doses of progesterone administered to nine pregnant women with low pregnandiol levels and susceptibility to abortion resulted in normal deliveries in four (45 pre cent), report Guterman and Tulsky in the *American Journal of Obstetrics and Gynecology* (58:495, 1949).

The group on whom this investigation was carried out consisted of nine patients who were given from 80 to 120 mg. progesterone intramuscularly every day, and four patients who were given intramuscular injection of peanut oil and who served as controls. Abortion occurred in all the controls within four to five days after starting the tests; whereas four of the nine treated patients carried to term. According to the authors, although this series of cases was small, the results would suggest further tests with progesterone in suitable cases.

In a previous study of 335 patients with threatened abortion, these authors found that 191 had normal pregnandiol excretion. About half received progresterone. No obvious difference was observed in the incidence of abortion in the treated and untreated cases.

Of 144 patients with reduced pregnandiol levels, 38 were treated with progesterone in the amount of 1 to 25 mg. daily and the remainder received no medication. The precentage of abortion was 97 per cent for both groups.

It would appear from these studies that in pregnant women with reduced pregnandiol levels and a previous history of spontaneous abortion, the administration of large amounts of progesterone may result in a normal pregnancy.

OFFICE UROLOGY*

By Elmer Belt, M. D., Los Angeles, Calif.

The science of urology as a specialty had its beginning with the designing of the cystoscope. It was in 1889 that the American surgeon, Tilden Brown, created a cystoscope which would permit clear visual examination of the bladder with the aid of a water irrigation system, a telescopic combination of lenses and Edison's cold electric lamp. A striking innovation in Brown's instrument was a telescopic sheath which carried with it two catheterizing channels which would guide catheters into the ureteral orifices under vision through the lens system thus permitting the pure collection of divided urines, an uncontaminated specimen from each kidney.

Here the science of urology began. It is the skillful use of this instrument and its successors which enabled men to exercise an especial adaptation in the study and handling of diseases of the genito-urinary tract.

The special worker, who had diagnosed the malady from which a given patient suffered, because of his particular interest in the problem, came to be the individual who had the most knowledge of it. Hence to him fell the responsibility of carrying out surgical relief when a surgical operation was indicated. In many cases constant watchfulness and further treatment of the damaged tract by means of special instruments had to follow as well as to precede operations upon the genito-urinary tract. So it became obvious, to the patient at least, that the man who knew how to handle the all-seeing instrument was the principal one who was to make him well.

X-RAY IMPROVED

As soon as the design of the X-ray machine improved to the point at which it became useful in determining kidney outlines and the presence of stone, the cystoscopist and the roentgenologist became dependent upon one another in the study of genito-urinary diseases.

A chapter in the study of the individual suffering from trouble in the genito-urinary tract, which threatened for a time to take him away from the cystoscopist, was the discovery by Zwick and Von Lichtenberg of a dye which could be given intravenously and would reveal to the roentgenologist the contours of the urinary tract without the aid of ureteral catheters placed by the cystoscopist. It took time for all to learn that the method of intravenous pyelography unaided by instrumentation led to many diagnostic errors which could have been prevented with the aid of a correlated cystoscopic study.

So the man trained in the use of the cystoscope as a diagnostic instrument continued to be the man who held a position closest to the patient, the one upon whom the patient most depended for help in this class of disease. Hence urology grew into being as a surgical specialty not alone because the cystoscopic study itself is a surgical procedure demanding surgical cleanliness but also because to the urologist fell the responsibility of operating surgically upon genito-urinary tract lesions which could not adequately be treated by means of the cystoscope. The urologist must be well trained to fill this wide responsibility which the patient himself places upon him. He must be clever at manipulating the many visual instruments which he has inherited, but he should also contribute his share of innovations to this field both while he is actually at work for the instant relief of the suffering patient and afterward in his shop as the creation of the moment is worked into final shape for the use of all.

OPEN SURGICAL PHASES

The open surgical phases of his work are no less interesting and demanding than is the use of the cystoscopic instrument. Even the earliest of surgical approaches are constantly being modified, simplified and made more adequate and less productive of surgical shock.

In the earliest phases of his work, historically, the genito-urinary specialist had to make on-the-spot determinations of the nature of the bacterial or parasitic invader for Public Health reporting, as well as for diagnostic purposes to inform the patient himself. He became adept at recognizing the microbic invaders of his field through the use of the Gram's stain, the dark field and the immediate use of simple culture media to separate those organisms capable of fermenting sugars from those which did not produce fermentation. It was important, too, to know of the presence of facultative anaerobes.

ACCURATE DIFFERENTIATION

Today the elementary separation of organisms which yielded to these simple measures is being replaced by a need for more accurate differentiation. This change has been brought about by the discovery and production of a long list of expensive antibiotics and useful bactericidal and bacteriostatic substances which can be used as specific antagonists to invading bacteria within the body of the patient. Indeed, in surgical procedures the body's needs may be anticipated and the dangers of the post-operative bacterial invaders can be predicated and planned against. Thus the various methods of closure of prostatectomy wounds without drainage or with drainage of a very simple sort have come into use because the efficiency of the antibiotics is so great that per primam healing in such cases through their use is now possible. Closure may even be dared in massive procedures such as one stage cystectomy with ureteral transplantation into the bowel, if the bowel's flora have been controlled with the agents presently available and if mechanical drainage of the bowel's contents through the nasal tube of Miller-Abbott is properly instituted.

The urologist's office in its appearance and equipment has reflected his possession of an ever-widening armamentarium of surgical skills and office procedures.

ANCIENT ALLIANCE

Due to his ancient alliance with venerology even the occupants of his waiting room differ now in appearance from those of earlier days. The old use of quantities of potassium permanganate solution and silver nitrate blackened the urologist's sinks no matter how sparklingly white they and his hopes were at the start. As the mode changed through the brilliant yellow neutral acriflavine to Young's all pervading mercurochrome, with its fast red which clung to everything it touched, the treatment room became rainbow-hued. Few such dyes are still considered useful. Silver nitrate, the earliest possession, still is found ready to every urologist's hand. Its tell-tale stains of black metallic silver deposits reveal its constant use.

The modern urologic office can be neat and attractive in its appearance. The extent of the work-up of each patient carried on within the office itself de-

*An Address to the Southwestern Medical Association Conference and the New Mexico Division of American Cancer Society, 10 November, 1949.

termines the amount of equipment which accrues.

In this highly mechanical specialty much is expected of the doctor by both the patient and the referring physician. With proper organization much can be accomplished in a very short time.

All important is the history and general physical examination. Here leads will develop which must not be lost sight of as the search for trouble goes on. It is an error to presume that because another physician has been in attendance these two important duties and opportunities of the new doctor should be overlooked. The new man with a fresh viewpoint may uncover extremely important facts which the patient himself thought too unimportant to mention in the history and which were overlooked in the physical examination.

IDEA FIXATION

Routine of any kind is apt to be the product of a fixation of ideas. Of all fields of human effort there is least room for fixed opinion in the science of medicine. Yet routine procedures are useful because they tend to prevent important omissions. Of these routine procedures in urology the flat X-ray plate of the abdomen stands next to the physical examination in yielding productive information. Much can be learned from it.

The flat X-ray plate of the abdomen should be clear enough to reveal the size and shape of each kidney. Each psoas shadow should clearly be visible. It should include a clear view of the entire bladder area at the bottom of the film and the region just above each kidney at the top. If retakes for bladder or kidney areas are found necessary and smaller films are selected for use, the target and film should remain in the identical position which would be adopted if the large film were used. It is a technical error to move the target downward to take a bladder film or upward to X -ray a selected kidney area.

The urine examination should include specific gravity, sugar, albumin and pH. It should yield an expression of the number of white and red cells, of the epithelial debris and of casts. The bacterial content should be seen by high-power inspection of a wet mount to determine motility of the organisms and to allow the familiar trichomonas to be seen. It should be viewed also through oil immersion inspection of the Gram's stained sediment to allow morphological and stained differentiation of the organisms to be recognized. The prostatic secretion should be inspected in the same way. Urine specimens for microscopic examination from women should be catheterized specimens.

FINDINGS

Findings, as they accumulate, determine the direction which further examinations must take. In a very large portion of the patients who have been referred to the urologist's office for study the following procedures are necessary: Intravenous pyelograms, an instrumental cysto-urethroscopic study, the collection of specimens for Grams and culture, from the bladder and from each kidney together with retrograde pyelograms, taken both in the horizontal position and standing, in those cases in which the flat plate of the abdomen and the intravenous pyelograms have not given adequate information.

The screening of patients who reach the urologist, both through other urologic patients who have referred them and by referring doctors, is usually so complete and accurate that the urologist seldom finds himself in the presence of a non-urologic new patient. The responsibility to the urologist of finding and revealing the troublesome urologic lesion is great. It is unpardonable for the urologist to overlook a urologic lesion.

The extent to which the urologist may proceed within his office in both treatment and investigation will vary widely depending upon the well-being of the patient, the availability of hospital beds in a given community and upon the office equipment and personnel with which the urologist surrounds himself.

EXACTING SPECIALTY

In so exacting a specialty as urology, urologists have found that working in a pair or in teams is so great an advantage that the practice is almost a rule. Thus skilled help is immediately available and larger procedures may be carried out than are safe in the one-man office. The doctors may spell one another in giving the easily administered pentothal or caudal anesthesias, for the greater comfort of their patients. Greater patient volume allows the hiring of trained technical help both for the general laboratory and the X-ray laboratory within the unit. In such well-organized offices retrograde pyelography as well as intravenous urography may be carried out saving many patient hospital days and much unnecessary loss of time. Those procedures for the determination of renal function levels such as the intravenous phenolsulphonphthalein test, the urea clearance test and the Addis test can accurately and safely be carried out as office procedures matching the laboratory technician's time against the time available to the patient who is a busy person also. It is an added safe-guard to the patient to have these tests done in a urologist-supervised laboratory.

CLOSE COOPERATION

Ephraim Shorr has taught us that the close cooperation of the laboratory with the urologist in the study and control of the stone former's phosphorus metabolism prevents the new formation of many phosphate stones after their surgical removal. Charles Huggins has shown us the need of testing for the enzymes, Acid and Alkaline phosphatase in our relentless battle against carcinoma of the prostate in the aged male.

As gynecologists and obstetricians who are interesting themselves in the problems presented by infertility come to realize that it takes a man as well as a woman to make a baby, a greater and greater number of husbands of the infertile pair are referred to the urologist for investigation. Great satisfaction comes to the urologist and gynecologist working together in bringing to a successful conclusion the management of an infertility problem in a youthful pair.

PROCREATIVE EFFICIENCY

Much of the work of estimating the procreative efficiency of the male can be carried out in the urologist's office. A step-by-step routine of investigation and inquiry is advisable. The careful history should include a survey of the patient's family and the degree of fertility shown by his immediate relatives. The number of children in each of his parents' families should be determined, as well as the fertility of each. An inquiry should also be made into the degree of fertility manifested by the patient's own brothers and sisters. The history should extend to the diseases of childhood of the patient, particularly inquiring into the state of malnutrition in childhood and the patient's encounters with debilitating diseases during childhood, or venereal disease during his premarital sexual life. The physical examination, of course, is directed to the genitalia, particularly the testicles, prostate, seminal vesicles, and whether or not the vasa defferentia show evidences through beading of scar tissue. A routine, complete blood count is necessary and a basal metabolic rate.

All of these procedures lead up to the main purpose of the examination, a careful study of the patient's own semen, which is the single, most important step in the study of the young man's problem. We prefer the collection of the semen in our office by

masturbation. We ask the patient to abstain from sexual intercourse for a period of five days previous to masturbation, within our own office. A comfortable room is provided and the patient is permitted to lock the door by which he entered the room, giving him a feeling of security which is most important in obtaining a complete ejaculation. He is given a weighed beaker and asked carefully to ejaculate into it the total specimen.

SEMEN EXAMINATION

The examination of the semen is then carried out by a trained technician in a detailed manner. The volume and weight of the specimen, its pH, the length of time necessary for mucolysis, the completeness of mucolysis are all matters of interest. In a counting chamber the number of sperm per c.c. is counted and from this count the total number of sperm in the specimen is estimated. The American Society for the Study of Sterility advise that a count of sixty million sperm per cubic centimeter is the low normal which may be expected to cause conception. A smear of the semen should be stained, a microscopic study of the morphology of the sperm made. At least 80 per cent of the sperm forms should be normal in appearance. An hourly evaluation of the number of motile sperm and the degree of motility is also considered an important observation for the record. We feel greater security if 75 per cent of the sperm forms are actively motile at the end of the first hour's observation, at room temperature. The determination should continue for at least four hours, at hourly intervals, and possibly another check should be made at the end of twenty-four hours and the results carefully tabulated.

ABSENCE OF SPERM

In the complete absence of sperm from the masturbated specimen, a testicular biopsy is the next step. This may be done by the aspiration method or a small incision may actually be made upon the upper pole of the epididymis and an incision made through a few of the tubules of the epididymis and its contents examined. If there are no sperm in the epididymis, clusters of testicular tubules may be examined. If the epididymis and testicular tissue show spermatozoa, an effort should be made to determine the point of obstruction along the course of the vasa deferentia. A vaso-vesiculogram may be done under local anesthesia in the office by injecting the ejaculatory ducts through the urethra, or even by picking up the vas deferens along its course through the scrotum and injecting it both in an upward and downward direction. If spermatozoa are found in the semen but are deficient in numbers with poor motility or show too many abnormal forms, treatment may be advantageous. Depending upon the level of the basal metabolic rate and the blood iodine, thyroid therapy may be found to be indicated. In the opinion of many the proper functioning of the thyroid has more to do with increasing and improving fertility than any other single factor. As a method of treatment daily injections of pituitary and chorionic gonadotropins may be needed.

MALE INFERTILITY

It is true that the present treatment of male infertility problems leaves much to be desired. With the constantly increasing volume of reasearch data being accumulated in the manner outlined above and in the biochemical laboratories as well, decided advances are being made in this problem holding out steadily increasing hope to young, potential parents who face the problem of infertility.

All these new laboratory tests and procedures increase the total cost of urologic care to the patient so greatly that their routine use becomes prohibitive unless the urologist brings them together within the realm of his own office where their cost may more easily be absorbed.

The urologist's office is therefore, primarily, a diagnostic center with its aim the complete urologic study. There the history should be taken, noting first the complaint, completely and fully in the patient's own words. The chronology of his symptoms and signs should then be brought into a well organized statement by the doctor. These are the things for which the patient seeks relief. They must constantly be kept in mind. But the history must then proceed to include the family history, the early life of the patient in his struggle with children's diseases, his accidents and operations, venereal diseases, a history of the gastro-intestinal, cardio-respiratory and neuro-muscular systems, his battles with rheumatism and a very carefully guided inquiry into his sex life.

PHYSICAL EXAMINATION

The physical examination should follow much the same path of inquiry. Texture and distribution of hair, the head's shape; condition of the eyes, their reflexes; the teeth and gums; the throat and mucous membranes; the nasal septum; the palate; the condition of the palpable glands; the heart and lungs; abdomen, genitalia, extremities and their reflexes, the sensorium, especially over the genital and perianal regions, the tone of the rectal sphincter and the all-important rectal and pelvic examinations should be noted. The competent examiner should have a fair notion of the size and position of each kidney before his inspection of the abdominal X-ray tells him what it is.

In the absence of acute inflammatory conditions the urinary tract examination may comprise a calibration of the urethra, inspection of the urethra, bladder neck and bladder, determination of residual urine, bladder tone and capacity. Each ureteral orifice should be watched as it functions. The appearance of the bladder mucosa in all areas must be noted.

CATHETERIZATION

Catheterization of the ureters, if indicated, should be done primarily with No. 4 ureteral catheters well lubricated with olive oil. Through each a small quantity of urine may be collected for Gram's stain on direct smear and for culture. These inlying catheters may then be used for retrograde pyelography. If diodrast is slowly injected through catheters of this small caliber as they are withdrawn, annoying renal colic will seldom occur because their small caliber permits the escape of the dye around the catheter into the bladder and prevents painful over-distention of the renal pelves. The retrograde pyelograms done routinely in an anterior posterior direction with the patient horizontal should immediately be followed by an anterior-posterior pyelogram in the relaxed upright position. Subsequently, special roentgenologic studies of urethra and bladder may be carried out. Intravenous urography may precede or succeed retrograde pyelography as indicated.

Laboratory examinations may include serologic tests for syphilis, urine, a complete blood count, with hemoglobin determination and sedimentation rate, total kidney function by the intravenous phenolsulphonphthalein test, with collection every fifteen minutes for two hours, the urea clearance test and the Addis test. This test will yield base-line determinations for specific gravity at its best concentration and for the urinary sediment under fixed standard conditions may be repeated at any future time for comparison.

OTHER MEANS

It is unlikely that such a review would permit a major urologic disease-process to escape detection.

For further elaboration other means might be needed, such as retrograde pyelograms taken in a lateral position and other odd procedures for special purposes.

For the routine treatment of urologic disease as differentiated from the diagnostic study, the urologist's office again has its pattern set by the ability of the urologist to handle his patients skillfully without too great pain and by the ease with which hospital beds are available to him.

It must be realized that no amount of skill in the handling of instruments, foresight in preparation of patient and instruments or of applied chemotherapy will prevent an occasional patient from having a post-instrumental fever and chill. The underlying cause of the phenomenon is, in fact, unknown. It has been known to follow prostatic massage, to follow the passing of a well lubricated soft rubber catheter or even the calibration of the pendulous urethra in searching for a urethal stricture which was not bound. It may be independent of bacterial invasion. If dependent upon manipulation, it usually occurs at once. There are those who contend that hospitalization on account of this possibility is highly desirable for all patients treated instrumentally, as a safety factor, not because such reactions are less frequent in hospital, but because they are more readily cared for there and less disturbing to the patient. This factor must be weighed and a proper balance struck for each urologist according to his need. Office treatment may thus be confined to the ever diminishing prostatic massage, or it may embrace all methods of instrumental treatment, even including fulguration of bladder tumors.

PROSTATIC RESECTION

It will be remembered that Dr. Davis, of Greenville, South Carolina, who brought electrosurgical prostatic resection to light and usefulness, routinely resected his patients in his office and then had them carried on stretcher across the street to hospital for convalescence.

The alert urologist will wisely avoid trouble by neither instrumenting or massaging the prostate of male patients who show acute urinary tract inflammation. The invading organism in such patients should be classified as rapidly as possible and the proper antibiotic or combination of antibiotics and bactericidal substances applied to the problem of clearing up the infection. Only in the control of residual infection should prostatic massage and instrumentation then be used. Prostatic massage is a procedure which should be used to promote drainage only. Rough massage or massage administered more frequently than three times a week, and better twice or even once a week, produces a mechanical irritation of its own. During prostatic massage a careful, routine evaluation of the pus count should be made and periodic stains of the material expressed should be followed in order to keep aware of the changing character of the invading organisms.

LIFE-LONG FRIENDSHIP

Gentleness in catheterization of the male who is obstructed of urination will frequently earn the life-long friendship of the individual who has been aided in the drainage of his bladder urine. The first principle of easy instrumentation is adequate lubrication; the second is the selection of a catheter of sufficient size snugly to fit the external urinary meatus. Too small a catheter often causes greater difficulty than need be encountered. If the Nelaton or Robinson catheter cannot be passed, a demi-rigid catheter with a Coude' tip, gently manipulated, may find its way through the obstructed prostate. A guiding finger in the rectum may often help catheterization immeasurably.

It is axiomatic that hematuria always necessitates a complete urologic study at the time the patient is bleeding. Much more can be learned at the moment of bleeding than can be learned after the bleeding has stopped. Hematuria must always be considered a sign of serious trouble, although it is equally axiomatic that every urologic lesion bleeds at some time in its course, no matter what its type, but because the most frequently bleeding lesions are tumors, stones and tuberculosis, the need of an immediate search for the cause of the hemorrhage is easily recognized. The one exception to the rule of immediate search for trouble is hemorrhage provoked by and in the presence of an acute infection. Of course fever, a high white count and dysuria, sudden in onset without a previous history of trouble would be a sufficient warning against stumbling into this error.

ANTI-BACTERIAL AGENTS

Anti-bacterial agents such as the sulfones and the antibiotics, should not be used uninterruptedly and singly over long periods of time because, in general, such use serves to make the bacteria refractive to the antibiotic in use.

Much of the urologist's time will be devoted to the treatment of cystitis and trigonitis. For the most part in women of late middle age, careful dilatation of the urethra, up to at least 28-French in caliber, following each dilatation with inflation of the urethra and injection through it by means of a blunt-tipped syringe placed at the external urinary meatus of a solution of ¼ per cent silver nitrate upward into the bladder will help an astonishing number of these patients to a sense of well-being. In dilating strictures of the urethra it is well to carry the upward dilatation forward only one or two gradations, on the French scale, at each sitting. Dilatation should occur no more frequently than once weekly. This slow dilatation pays dividends in the prevention of the production of increased scar tissue. Too tight a meatus in both male and female is often the provocative cause of a trouble which appears on superficial examination to be more deep-seated. A skillful meatotomy will produce markedly beneficial results in such patients.

PENICILLIN EFFECTIVE

The remarkable effectiveness of Penicillin in the treatment of gonorrhea has brought to all of us a great sense of relief from the burden of the previously endless treatment of these unfortunates. There is a penalty in wait for the unwary urologist who, satisfied with the effective treatment of the gonorrheaic through the medium of Penicillin, neglects to take a Wassermann test at the end of two or three months to pick up the luetic infection which may have been suppressed beyond recognition by the early Penicillin treatment of the gonorrhea. Serologic tests for syphilis should be made in the third and 6th month after every infection with gonorrhea.

Sufferers from renal colic should first have the cause of their malady carefully diagnosed. In proven renal colic it must not be forgotten that giving Atropine before giving Morphine effects far greater relief than does Morphine alone. Profenil and other smooth-muscle relaxing drugs have been shown to be of great advantage in cases of renal colic.

SECONAL HELPS

One or two words for the little patient; Seconal given rectally, half to three-quarters of an hour before cystoscopic study, can be depended upon to help in the examination and to serve to make the patient forgetful of the cystoscopic experience, so that if instrumentation is necessary a second time the ordeal will not be so greatly dreaded. It is not, in our opinion, necessary to give an ether anesthetic to the child who must be studied cystoscopically. Instruments have been scaled

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CEREBRAL PALSY

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Cerebral palsy is a general term used to designate neuromuscular and sensory disturbances which have resulted from lesions within the central nervous system. There are six main classes or types, which are:— 1) cerebral spastic paralysis, 2) athetosis, 3) ataxia, 4) tremor, 5) rigidity, and 6) flaccidity. Phelps' classification is given in Figure 1. There may also be mixed types, combinations of the above, and also a miscellaneous group in which those with mental retardation, dystonia and mixed dominants are placed. The main types of cerebral palsy will be defined and discussed later.

Most of our contacts with the cerebral palsied come through the Department of Public Welfare clinics and the hospital clinics which are held the first three Thursdays of each month at the Carrie Tingley Hospital for Crippled Children. After examination, the cerebral palsied individual is placed into one of the major diagnostic groups so that he may receive proper treatment. The first problem we investigate is the intelligence of the individual. We do not attempt to form an opinion at the first investigation. No single intelligence test can be applied to the cerebral palsied patient which will give us the intelligence quotient accurately. The Minnesota Pre-School Scale, the Vineland Maturity Scale and the Oseretsky Motor Proficiency test have been used. With few exceptions, normal intelligence is essential to carry out a satisfactory program of treatment. In doubtful cases the cerebral palsied child is admitted to the hospital to undergo a period of observation. The observation period enables us to get acquainted with the child and it enables him to get better acquainted with us and the hospital regime. A cerebral palsied patient usually gives a much better impression on second examination. After a week or ten days of observation, general, neurologic and orthopaedic examinations are repeated. Special birth history and cerebral palsy examination forms are filled out (Figures 2 and 3). If we feel the child can be benefited by treatment, he is admitted as a regular patient. If no orthopaedic treatment is indicated, the parents are referred to a special school for the cerebral palsied, where the necessary physical, occupational and speech therapy can be given, as well as special schooling. Physicians who treat the cerebral palsied feel that in order of importance, speech comes first, the use of the hands second and locomotion Third.

SPEECH

As yet we do not have funds for a speech therapist and cannot carry out that part of the program. Fortunately, relatively few of our cerebral palsied patients under treatment at the present time have serious speech difficulties. We have succeeded in teaching these to form a few simple words so that they can make their needs known. Inability to move or properly control the speech musculature is a common cause of no speech or defective speech in the cerebral palsied. Speech defects due to faulty hearing are found in both the athetoid and spastic patients. A simple test to determine ability to control speech musculature is: — First, tongue control — Find out if the child can move the tip of the tongue in various directions on command, and if he can move the back of his tongue by saying "ca ca" or "ga ga". Second, lip control — Opening and closing teeth and lips and making lips round. Third, diaphragm and pharyngeal control — Can the child direct the outgoing breath through his nose and through his mouth on command. A health nurse or parent can make these simple tests provided the child is old enough to understand the requests. A child who seems to be hard of hearing should be tested by an otologist or an experienced audiometrician. Most speech defects should be corrected by an experienced speech therapist.

USE OF THE HANDS

Training in the use of the hands consists of learning simple manual skills including dressing and undressing, brushing teeth, washing face and hands and eating. This training makes a child more self sufficient. Also, when he goes home he is able to relieve a member of the family of these duties. This program should be supervised by a trained occupational therapist and much progress can be made with help from all who attend the child.

LOCOMOTION

Locomotion is primarily an orthopaedic and physical therapy problem. Some children are taught to walk without resorting to surgical correction or the use of braces. Others need both surgical correction and braces before walking is mechanically possible. The child learns sitting balance in a special chair and standing balance in the standing table. Walking is accompanied by special training with the aid of braces, parallel bars and crutches. Walking skis, stationary bicycles and other special apparatus are employed in special cases. We must keep in mind that there are a great number of cerebral palsied children who can be rehabilitated in a short time and who need little or no training in speech, use of the hands or balance. The mild spastic monoplegias and hemiplegias are

CLASSIFICATION FOR CEREBRAL PALSY
PHELPS

(FIGURE 1)

SPASTIC—Area 4 & 6
1. Moderate
2. Severe
3. Atonic
   A. Paraplegia
   B. Monoplegia
   C. Quadriplegia

ATHETOID—Basal Ganglia
1. Non-tension
2. Tension
   A. Moderate
   B. Severe
3. Head and Shoulder
4. Dystonic
5. Shudder
6. Tremor with Tension
7. Tremor without Tension
8. Pitch Cut Off
9. Opisthotonic

TREMOR—Cerebellar
1. Nonintention
2. Intention
3. Constant

RIGIDITY—Area 6
1. Intermittent
2. Constant

ATAXIC—Cerebellar
1. 8th Nerve
2. Cerebellar
3. True Ataxia

FLACCIDITY—Area 4
1. Paraplegia
2. Monoplegia
3. Quadriplegia

MIXED—
1. Basilar
2. Athetoid with Rigidity
3. Spastic with Athetosis
4. Spastic with Polio
5. Athetosis with Deafness

MISCELLANEOUS—
1. Spastic with Rigidity (Seizures)
2. Dystonia
3. Mixed Dominant
4. Spastic with Arthritis
5. Mental Retardation
6. Dystonia with Blindness—Deafness
7. Postoperative spastic

Carrie Tingley Hospital for Crippled Children

CEREBRAL PALSY BIRTH HISTORY FORM

(FIGURE 2)

Patient---Date---No.---

Address---Parent---Age---

City---Phone---B. D.---

State---Occup.---Ref.---

CC. Legs Arms Speech

FH:— Similar conditions mother's family---

Similar conditions father's family---

Obstetrical:— 1st---2nd---3rd---4th---5th---6th---Preg.

Mother's age ---father's age---at patient's birth

Miscarriages---

Unusual conditions during pregnancy---

Birth:— Term ---Premature ---Late---Weight---

Labor:— Normal ---Precipitate ---Prolonged---

Presentation:— Head ---Transverse ---Breech---Footling---

Instruments ---Surgery---Drugs--- ---

Mother's Condition After Delivery:— Normal ---Tears ---Infections---

Repairs---

Child's Condition After Delivery:— Normal ---Blue ---Jaundice ---

Resuscitation ---Resuscitation ---

Convulsions ---Paralysis --- ---

Medicine Dropper --- ---

Infancy:— Feeding ---

Regained Weight ---Activity ---Convulsions ---

Development:— Held Head Up---Walked Assisted ---

Sat Alone ---Stood Alone ---

Pulled Up ---Walked Alone ---

Condition First Noted---Talked---

Dress Self---Feed Self---Take care of bathroom needs---

Abnormal Bleeding ---Sight---Hearing--- ---

Illnesses During Childhood:— ---

Disposition:— Happy---Cross---Fears---

Affectionate---Dependable---Concentration---

Appetite---Bowels---Toilet Training---

Handedness:— Child---Father's Family---Mother's Family---

Schooling:— ---

Interests:— Scholastic---Hobbies--- ---

Athletics---Activities---

Treatment:— Surgical---

Medical---

Maturity Level:— Motor---

Personal - Social---

Language---

Adaptive---

included in this group. Fortunately, the severe athetoid and spastic quadriplegias are in the minority. In the past three years, 505 cerebral palsied children have been registered, examined and classified at the Carrie Tingley Hospital for Crippled Children. Fortunately, many of these patients are mildly involved. Another group requires the services of a cerebral palsy school but cannot be admitted to such a school because of lack of funds and lack of space in the acceptable schools. The Crippled Children's Services of the Department of Public Welfare refer the majority of these cerebral palsied patients to the Carrie Tingley Hospital. It is presumed that there are approximately 250 more cerebral palsied patients who have not been registered. Early diagnosis and treatment of cerebral palsied children is essential for a good medical program.

TERM DEFINED

The term, cerebral palsy, constitutes at least six main classes of handicapped children, of which the older term, cerebral spastic paralysis or Little's disease, is only one of the group. Athetosis, ataxia, tremor, rigidity and flaccidity are the five remaining classes. Mental deficiency may occur in any, but is most common in the spastic and rigidity types. The spastic paralysis group constitutes over 50 per cent of the cerebral palsied individuals. H. R. McCarroll and J. R. Schwartzmann from the Shriners' Hospital for Crippled Children in St. Louis reported 70 per cent true spastics in 1,720 cases. Spasticity is characterized by the presence of the stretch reflex which is an uncontrollable contraction when the muscle is suddenly stretched or when its antagonist is willed to contract. Hyperactive reflexes, ankle and patellar clonus and increased muscle tone is common. Anatomically the lesion is in some portion of the pyramidal tract. Most cases can be classified as to cause under one of the three headings: — 1) Traumatic, 2) developmental, and 3) infection.

ATHETOID TYPE

The next most common type of cerebral palsy is the athetoid group. Athetosis comes from the Greek, meaning "always moving". There are many involuntary motions in which the involved muscles take on a certain pattern or position. This position tends to be retained no matter what muscle or group of muscles is used. There are at least a dozen types of athetosis. The physician must be highly experienced in his field to recognize the various subtypes. Athetosis is usually due to a damage or failure of development of the basal ganglia. They must be differentiated from the spastics because their treatment is much different, both conservative and surgical. It is valuable in reviewing the history to obtain photographs of the child at various ages. The position of the limbs tends to change from time to time. This change is termed the athetoid shift. Surgery is justified infrequently. The chief indication is correction of contractures in the neglected cases so that control braces may be used to make locomotion possible.

ATAXIC TYPE

The ataxic type of cerebral palsy is characterized by loss of balance control with resultant involuntary movements in attempts to regain control and maintain equilibrium. Nystagmus is frequently present. Orthopaedic surgical procedures are usually not needed. The whole program is built around occupational and physical therapy to train the individual in standing and walking balance and the use of the hands.

The rigidity type of cerebral palsy has long been confused with the spastic type, but it can be differentiated by the lack of elasticity in the muscles when they are stretched. The sensation is similar to bending a soft lead pipe. Mental deficiency is common in the rigidity type. Treatment is similar to that in spastic paralysis.

The tremor type of cerebral palsy is uncommon. It is characterized by fine or coarse involuntary but rhythmic contractions. Orthopaedic treatment is usually not indicated. Physical therapy modalities are effective in training the patient with tremor.

FLACCIDITY TYPE

The flaccidity type of cerebral palsy is also rare and, in its pure form, the child resembles a "rag doll". I know of only two in New Mexico. These are brothers. In making a diagnosis, the physician must rule out amyotonia congenita. Rehabilitation of this severe type is not possible with present methods.

It is obvious that no single method of treatment can be instituted. Many methods of treatment for multiple handicaps must be combined in this field. It is true that cerebral palsy cannot be cured by our methods at present, but it can be ameliorated to a very great extent, especially when treatment is started at an early period by experts. Surgical treatment of the cerebral palsied is confined mostly to the spastic types. Neurectomies, tendon transplantations, bone stabilizations and osteotomies are all extremely valuable in correcting the multiple deformities of the spastic child. The milder spastics require no surgery but can be treated by physical therapy and braces.

USE OF BRACES

Braces are usually used for quite different purposes in the cerebral palsied than in those children afflicted with infantile paralysis. In the athetoid children, braces are applied to control the poorly coordinated and unwanted motions. Braces are constructed so that individual muscle groups can be trained to function under voluntary control. The braces must be specially made and well fitted and well balanced. The athetoid child requires years of standing and walking experience in these control braces. The spastic child requires braces to overcome the spastic muscle and place the limb in proper position, and also to prevent contractures. Details of bracing the spastic and athetoid patients are discussed in "Cerebral Palsy: — Spasticity."

SPECIFICATIONS

The following is a summary of specifications for braces for cerebral palsied patients:—

1) All braces should be calipered. Use the small round caliper for the smaller children and the flat caliper with separate ankle joints for the larger children.
2) Hip joints should be ball bearing. Pelvic band should be wide, strong and rigid and extending from AP spine to AP spine around back. Leather strap should be in front.
3) Pelvic band should have back uprights to get better control.
4) For large patients with spastic adductors and internal rotators, a strong pelvic band is necessary.
5) The shoes should be reinforced with long sole plates extending to beneath the metatarsal head; otherwise, if marked equinus, they will break the shanks just distal to the short plate. Remove heel counters from shoes to prevent blisters.
6) Be sure the braces are perfectly aligned at right angles to the bars and will stand alone — so well balanced that the braces practically stand and walk by themselves. If the braces are not balanced in this way, the child will not be able to use them.

PHYSICAL THERAPY FIELD

In the physical therapy field, many modalities are used in the treatment of cerebral palsy. The physical

Carrie Tingley Hospital for Crippled Children

CEREBRAL PALSY EXAMINATION FORM

(FIGURE 3)

Name----------Date----------Case No.----------

Address----------Height----------Weight----------

	Normal	Good	Fair	Poor
General Appearance				
Nutrition				
Muscular Development				
Voluntary Ability to Move at Will				
Trunk Function				
Leg Function				
Speech				
Facial Control				
Sight				
Hearing				
Maturity Level, Motor				
Maturity Level, Personal–Social				
Maturity Level, Language				
Maturity Level, Adaptive				

	Right	Left
AJ		
Clonus		
Babinski		
Cremasterics		
Abdominals		
Biceps		
Triceps		
Periosteals		
KK		

Eye Motions:
Nystagmus----------
Strabismus----------
Pupils----------

Tongue Motions:
Extension----------
Retraction----------
Lateral----------
Upward----------
Downward----------

Handedness----------

Classification	Rt. Arm	Rt. Leg	Lt. Arm	Lt. Leg	Neck	Trunk	Face
Spasticity							
Athetosis							
Non-tension							
Tension							
Ataxia							
Tremor							
Intention							
Non-Intention							
Rigidity							

Diagnosis Etiology Prognosis Treatable

Aim of Treatment

Method of Treatment

therapy treatment must be carefully selected for each patient. Among the modalities are massage, passive motion, active assistive motion, active motion, resisted motion, conditioned motion, automatic motion, combined motion, rest, relaxation, motion from the relaxed position, balance and reciprocations exercises.

The organization chart, as shown in Figure 4, gives some idea of the complexity of the cerebral palsy program and the multiple needs that must be met by all concerned.

SUMMARY

1) A brief orientation in the field of cerebral palsy is presented.
2) A classification for cerebral palsy (Phelps'), as well as special birth history and examination forms are presented to guide the physician in his diagnosis and examination.
3) In general, the cerebral palsied patient responds favorably to special physical therapy modalities.
4) The spastic type of cerebral palsy is the only one in which orthopaedic surgical methods are indicated, and then only the severe or neglected spastic patient. Early conservative treatment is the treatment of choice.

I wish to thank Mrs. Jane Osburn, medical secretary, for her valuable assistance arranging and typing this manuscript. — W. L. Minear, M. D.

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Prophylactic Measures To Control Epidemic Keratoconjunctivitis

In presenting the epidemiology of epidemic keratoconjunctivitis in the *Journal of Ophthalmology* (July 1949), Thygeson reports from his experiences during the epidemics of 1941-1942 and 1947-1948 that numerous transmissions are due to contamination during office practice. The disease was transmitted by use of contaminated solutions such as tetracaine, cocaine-epinephrine and homatropine, from contaminated tonometers, direct finger to eye transmission and fomites. Asymptomatic conjunctival of respiratory carriers could not be demonstrated.

In order to prevent transmission through office procedures, the following measures for prophylaxis were suggested:

(1) Discard all dropper bottles.
(2) Use individual sterilizable droppers.
(3) Wash hands thoroughly before and after treatment.
(4) Use disposable treatment chair arm covers.
(5) Use of individual masks and goggles for industrial workers.
(6) Recognize and isolate cases early.

Office Urology

(Continued From Page 366)

down to child and infant size so that unusual trauma to the urinary tract is not necessary. If properly handled, children who need routine urologic treatment can be cared for with the same dignity and dispatch which should characterize the handling of adults. Special methods of anesthesia are not necessary. The neglect of completeness in the study of the child urologic patient is even less forgivable than in the adult because the underlying, troublemaking lesion in the child may be the presence of a congenital anomaly which, if recognized early, is correctible, but if neglected may result in the destruction of either one or both kidneys. The congenital lesions of childhood are even more responsive to treatment than are the acquired lesions of adult life. There is much satisfaction in the treatment of the child urologic patient because of the delightful long-lasting results which can be obtained.

Organization Chart-Basic Units In A C. P. Clinic

SUPERINTENDENT
MEDICAL DIRECTOR
PEDIATRIC, NEUROLOGICAL OR ORTHOPEDIC DOCTOR

EXECUTIVE DIRECTOR OF CLINIC

DIAGNOSTIC STAFF
1. Neurologist
2. Orthopedist
3. Psychologist
4. Eye and Ear
5. Psychiatrist

CEREBRAL PALSY COMMITTEE
(Doctors, Trusties, Etc.)

Physiotherapy	Speech	Occupational Therapy	Soc. Service Conditions the Field For	Education	Parents Club
Teacher Control. Control of Muscles and Muscle Groups. Progressive Relaxation for Athetoids. Coordination for Ataxias and Spastics Walking Standing Balance	Athetoids. Central Deafness, Correction of Reversed Breathing. Spastic Stretch Reflex (Ruled Out). Breating. Tongue and Lip Control. Ataxias Placement.	Translates Control Learned in P.T. to Active Skills in O.T. 1. Feeding Aids 2. Dressing 3. Active Skills 4. Socialization Groups.	1. Contacts 2. Social History 3. Out Patients 4. Financial Arrangement 5. Transportation 6. Follow-Up.	Specially Trained School Teachers, Private Tutors, Public Schools.	Parents Understanding. 1. Check Up In Family by Tech. 2. Coordination.

(FIGURE 4)

"Reason Has Never Failed Men"

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as a "slush fund" to be used **against** the American people! Of course, the money spent for this administration booklet, for recordings of speeches by Mr. Ewing, tax money used for propaganda purposes, or the campaign fund of the Democratic National Committee can in no way be considered a "slush fund". The shoe doesn't fit "us Democrats".

The honored profession of medicine, the individual doctor and his organizations are placed before the people as money-mad oppressors who gloat in the misery of human illness and disease. This is the shopworn technique of socialists. Alienate the majority of the people against a person, a group, an organization, or a class with deliberate lies and misrepresentation — then move in and take over! A very careful reading of this booklet reveals no reference to the fact that America has the finest medical care in the world, the best hospitals, the highest life expectancy, etc. The theme is entirely derogatory and after medical care becomes the property of our benevolent government — one by one, these lovers of humanity and the common man will attack and take over every section of free enterprise under similar pretenses. At the same time they shout platitudes of freedom from the housetops.

PROPAGANDA PIECE

This booklet is an effective piece of propaganda only because there are so many gullible people in America — for one reason or another. There are, for instance, those who think the Democratic Party can do no wrong — they vote "straight". They use no logic or reason — they are born Democrats. Then there are those who labor under the false idea that what they can get from the government costs them nothing — so the more the merrier! The love of money has made them loyal supporters of a misguided party that promises anything and everything to remain in power. Similarly, there are far too many Americans who take no interest in the state of their government. They do not take the trouble to vote, thus allowing professional politicians to usurp their power at the polls.

Has the time come for these people to reflect upon what this party is costing them in return for what they are getting? Most of them love their freedom above all things! Do they now see freedom slipping away from them on a "security balloon"? If so, reason shall prevail and save America from Socialism. "Reason never has failed men". It shall not fail America today or tomorrow!

VITAMIN A

Comparative Absoption Of Various Types Of Vitamin A Preparations

Lewis, J. M. & Cohlan, S. Q., M. Clin. North America 34:413, 1950

Unit for unit, so-called "aqueous" vitamin A preparations are more potent than oil products due to the minute particle size of the oil as present in the former. Because some mothers have induced hypervitaminosis A in infants by administration of large doses of high potency oils, it is suggested that the capacity of vitamin A bottles be limited to 15 cc. and potency be fixed at 10,000 units per cc. "Under these circumstances, it will be most unlikely for hypervitaminosis A to take place."

N. Y. U. College Med., Bellevue, & Beth Israel Hospts.

Oral Antibiotic Effective in Treatment Of Infections

After use on a large number of patients over a period of a year, aureomycin by oral administration has proved efficacious in the treatment of a variety of infectious diseases. The present status of aureomycin is summarized by Spink and Yow in the *Journal of the American Medical Association* (December 3, 1949). It is their opinion that aureomycin is of value in bacterial infections due to gram positive organisms, some gram negative organisms, and in rickettsial and virus diseases.

In staphylococcic infections including bacteremia resistant to penicillin or sterptomycin, pneumococcic pneumonia, sub-acute bacterial endocarditis in which the invading organism is Streptococcus viridans or Streptococcus faecalis, and in infections due to beta-hemolytic streptococci or Strepcoccus faecalis, aureomycin has been of therapeutic value.

Among the gram negative organisms effectively controlled by aureomycin are meningococci, Escherichia coli, Aerobacter aerogenes, Klebsiella pneumoniae and Hemophilus influenzae. Gonorrhea has responded favorably to the administration of aureomycin, although less dramatically than with penicillin. Encouraging results have been obtained with its application in granuloma inguinale, tularemia, brucellosis and whooping cough.

Experimental and clinical studies have shown aureomycin to be therapeutically effective in Rocky Mountain spotted fever, recrudescent epidemic typhus (Brill's disease), Q fever and murine typhus. Aureomycin has been used successfully in the treatment of lympogranuloma venereum, infectious mononucleosis and atypical pneumonia. Experimentally it is active against the virus causing psittacosis, the spirochete of repasing fever and leptospirosis.

A satisfactory dosage schedule has been 30 to 50 mg. per kilogram of body weight per day. It is administered orally to adults in a dose of 0.5 Gm. every six hours for one to three weeks.

Untoward effects from aureomycin are minimal. Nausea may be encountered. Vomiting, epigastric distress, soft stools and burning of the rectum have also occurred.

Body Areas Known to be Susceptible to Cancers of Industrial Origin

Carcinogenic agents have affinities for specific organs. A partial list of the agents which can cause cancer and the organs affected is as follows:

SKIN: sunlight, arsenic, paraffin oil, shale oil, pitch and tar, some crude oils, roentgen rays and radium, anthracene oil, lubricating oils, creosote.

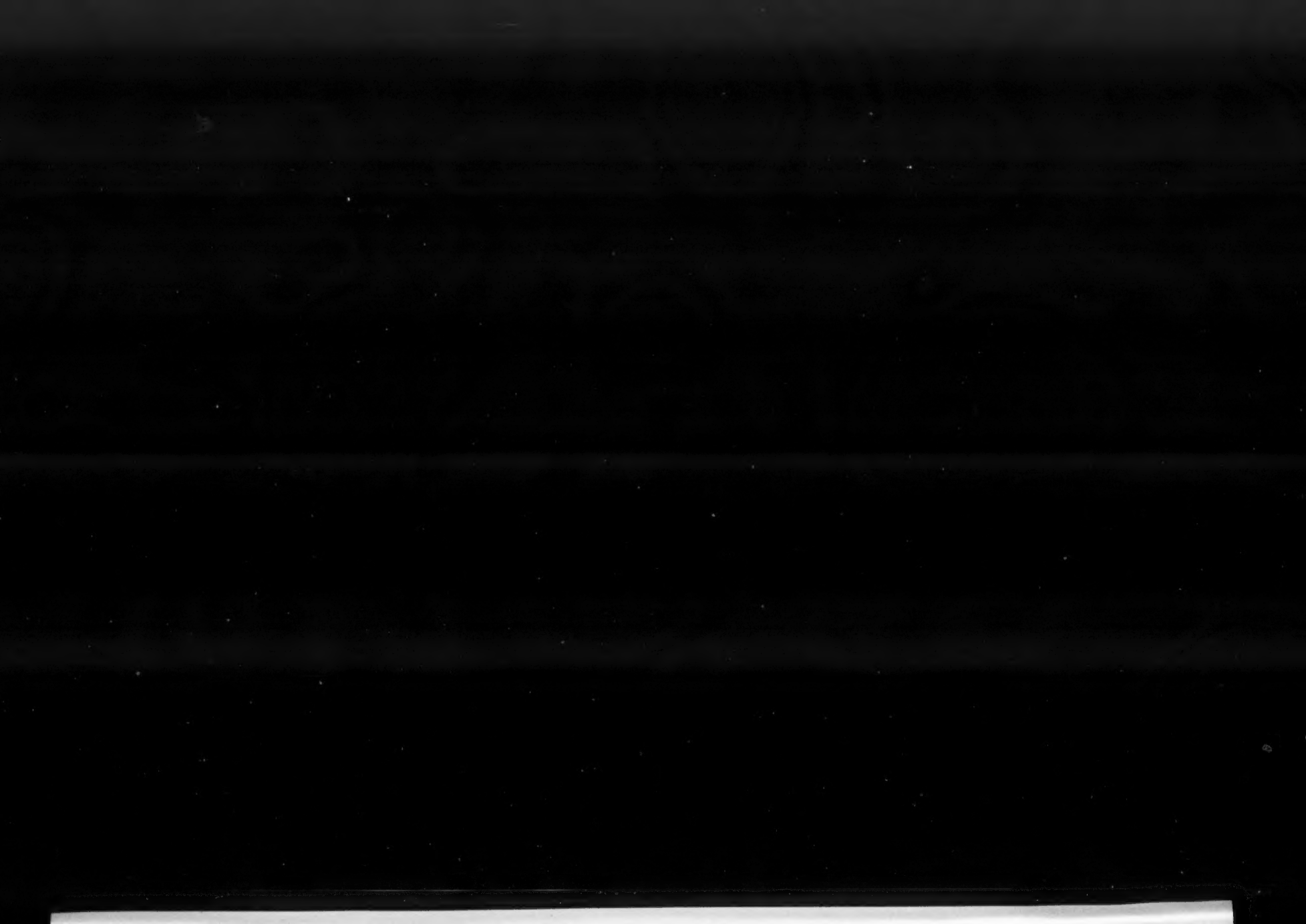
SCROTUM: soot from certain kinds of coal, mineral oils.

BLADDER, URETER, KIDNEY: aromatic amines, bladder worms.

NASAL SINUSES: nickel carbonyl.

LUNGS: tar fumes, uranium, chromates, asbestos.

BLOOD FORMING ORGANS (LEUKEMIA): radium, x-rays, benzol.

BONES: radium.

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